



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,040	02/25/2000	Jianzhong Jiao	98,766	7630

20306 7590 11/05/2003

MCDONNELL BOEHNEN HULBERT & BERGHOFF
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER

CHOI, JACOB Y

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/513,040

Applicant(s)

JIAO ET AL.

Examiner

Jacob Y Choi

Art Unit

2875

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 11, 14, 17, 18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11, 14, 17, 18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10, 11, 14, 17, 18, & 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons et al. (USPN 6,155,694) in view of Ishikawa (USPN 5,584,572).

Regarding claim 1, Lyons et al. discloses an automotive faceted elongated reflector (18) extending from a first surface end (right) to a second surface end (left), the automotive faceted elongated reflector (18) positioned on both sides of an elongated tubular light source (14), the automotive faceted elongated reflector reflecting light emanating from the elongated tubular light source (14) towards a rectangular aperture of the automotive tubular reflector (figure 1), an automotive elongated parabolic reflector having a smooth reflective surface, the automotive elongated parabolic reflector connected to the first surface end of the automotive faceted elongated reflector, wherein the elongated tubular light source is *freely positioned* (figures 1 & 2) within the automotive elongated parabolic reflector so that light emanating from the elongated tubular light source (14) is reflected off of the smooth reflective surface of the

Art Unit: 2875

automotive elongated semi-circular reflector and re-directed to pass through the elongated tubular light source towards the rectangular aperture (column 4 lines 40-65; "forwardly directed beam") of the automotive tubular reflector (18). Lyons et al. discloses the claimed invention except an elongated semi-circular reflector. Ishikawa teaches that it is known to utilize specific shaped semi-circular reflector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use modification in Lyons et al. as taught by Ishikawa in order to provide a improved reflector body to produce a desired light output pattern.

Note: it has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed (an automotive / vehicle stop lamp) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 2, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses the reflector portion is a semi-elliptical reflector.

Regarding claim 3, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses a lens means coupled to the semi-circular reflector, the lens means processing the reflected light.

Regarding claim 4, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses a reflective surface disposed on the smooth semi-circular surface.

Regarding claim 5, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses a reflective surface disposed on the semi-circular reflector.

Regarding claim 6, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses the reflective finish disposed on the semi-circular reflector is essentially the same as a reflective finish disposed on the semi-circular surface (Figures 1-9).

Regarding claim 7, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses a semi-circular reflector having an elongated tubular light source mounted in the semi-circular reflector, the semi-circular reflector reflecting light emanating from the elongated tubular light source, and a multi-faceted reflector (22, 22a, 24, 24a) coupled to the semi-circular reflector (20, 20a), the multi-faceted reflector having an least two facets positioned at angles to one another so that light emanating from the elongated tubular light source is reflected away from the light source (Figures 1-9).

Regarding claim 8, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses a lens means coupled to the multi-faceted reflector, the lens means received and processes the reflected light.

Regarding claim 10, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses the securing means is provided to the reflector.

Regarding claim 11, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. discloses the automotive elongated reflector is a vehicle lamp.

Regarding claim 14, Lyons et al. discloses a housing portion having an interior reflecting surface that comprises a plurality of facets, an automotive elongated parabolic reflector portion connected to the interior reflecting surface, an elongated tubular light source freely positioned in the automotive elongated parabolic reflector portion, the automotive elongated parabolic reflector portion formed around the elongated tubular light source so that light emanating from the elongated tubular light source is reflected off of the automotive elongated parabolic reflector portion and re-directed to pass through the elongated tubular light source and a lens portion coupled to the housing portion. Lyons et al. discloses the claimed invention except details of elongated semi-circular reflector. Ishikawa teaches that it is known to utilize specific shaped (1st and 2nd reflective finish) semi-circular reflector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use modification in Lyons et al. as taught by Ishikawa in order to provide a improved reflector body to produce a desired light output pattern.

Note: The functional recitation that "the first and second reflective finish reflects light from the elongated tubular light source towards the lens portion, and wherein each facet location and angel are chosen to create a light distribution pattern that complies with automotive signal lighting requirements" has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional

recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Regarding claim 17, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses the plurality of facets are arranged in a stepwise orientation (Figures 1-9).

Regarding claim 18, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses each facet of the plurality of facets has a similar reflective finish.

Regarding claim 20, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Ishikawa discloses the reflector is semi-elliptical (front portions of the light source).

Regarding claims 21 & 23, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses the claimed invention except for the specified equation. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shapes of the reflector to optimize the shape of the reflector to improve the light distribution from the light source, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 22, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses each facet location and angle are chosen to create the light distribution pattern that complies with signal lighting requirements by setting desired outer and inner light distribution angles.

Regarding claim 24, Lyons et al. in view of Ishikawa discloses the claimed invention, explained above. In addition, Lyons et al. and Ishikawa discloses the light distribution pattern that complies with signal lighting requirements.

Response to Amendment

5. Examiner acknowledges that the applicant has amended claims 21, & 23 and cancelled claims 9, 12, 13, 15, 16, & 19.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8, 10, 11, 14, 17, 18, 20-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blinow (USPN 4,412,276) – strobe reflector assembly

Pizzuti et al. (USPN 4,460,942) – electronic flash with flashtube retention strap

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (703) 308-4792. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7724.

JC



ALAN CARIASO
PRIMARY EXAMINER